Paper No. 37

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GUY T. BLALOCK
and
KEVIN G. DONOHOE

Appeal No. 2000-0042
Application No. 08/948,179

ON BRIEF

Before KIMLIN, LIEBERMAN and JEFFREY T. SMITH, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-13, 15-27, 29 and 31, all the claims remaining in the present application. Claim 1 is illustrative:

1. A method of facet etching for use during the fabrication of a semiconductor device, said method comprising:

providing a substrate with raised structures on a surface thereof, said raised structures having tops and sides and upper corners at junctions of said tops and said sides, and said substrate and said raised structures being covered conformably with an etching layer of a material to be facet etched; and

sputter etching said etching layer in a plasma including an inert gas, and a heavy halogen gas, wherein the heavy halogen gas is present in the plasma in a sufficient amount such that the sputtering ratio of the sputter rate of said etching layer at the upper corners of said raised structures to the sputter rate of said etching layer at said substrate is greater than 4:1.

In the rejection of the appealed claims, the examiner does not rely upon prior art.

Appealed claims 1-13, 15-27, 29 and 31 stand rejected under 35 U.S.C. § 112, first paragraph, enablement requirement.

We have thoroughly reviewed the respective positions advanced by appellants and the examiner. In so doing, we find ourselves in agreement with appellants that the examiner has not made out a prima facie case of non-enablement within the meaning of 35 U.S.C. § 112, first paragraph. Accordingly, for the reasons set forth by appellants in the principal and reply briefs on appeal, we will not sustain the examiner's rejection.

It is well settled that in order for an examiner to properly impose a rejection under the enablement provision of 35 U.S.C. § 112, first paragraph, the examiner has the initial burden of establishing, by compelling reasoning or objective evidence, that

one of ordinary skill in the art would be unable to practice the claimed invention without undue experimentation. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563 (CCPA 1982); In re Marzocchi, 439 F.2d 220, 223, 169 USPQ 367, 369 (CCPA 1971); In re Armbruster, 512 F.2d 676, 677, 185 USPQ 152, 153 (CCPA 1975). In the present case, the examiner has done little more than question whether one of ordinary skill in the art would be able to practice the claimed method of facet etching with a heavy halogen gas without undue experimentation. Such a general query does not satisfy the examiner's burden of, in the first instance, setting forth reasoning or objective evidence which demonstrates that the skilled artisan would, in fact, experience considerable difficulty in practicing the claimed method. The lack of details in the present specification concerning the operating parameters of the method does not alleviate the examiner of providing a factual basis for a prima facie case of non-enablement.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN Administrative Patent Judge	)	
PAUL LIEBERMAN Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY T. SMITH Administrative Patent Judge	)	

ECK:clm

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